

~~CONFIDENTIAL~~
~~ATTY 34 AARS~~Claims:

1. A surgical reamer for cutting a bone socket, comprising:

a cutting structure rotatable about a longitudinal axis and having a domed shell portion with an outer surface presenting multiple cutting sites and an inner surface for accumulation of debris, the shell having a static insertion profile being defined by a first curved portion generated about a first radius with a center that lies on the axis and a second curved portion generated about a center that is spaced apart from the axis, the cutting structure having a dynamic profile area generated upon rotation, both static insertion and dynamic profile areas lying transverse to the axis, wherein the static insertion profile area is smaller than the dynamic profile area.

2. The reamer of Claim 1 further comprising a pair of first curved portions that are situated in opposed relationship to one another with respect to the shell.
3. The reamer of Claim 2 wherein the pair of first curved portions describes a diameter of the domed shell.
4. The reamer of Claim 1 further comprising a pair of second curved portions that are situated in opposed relationship from one another with respect to the shell.
5. The reamer of Claim 4 wherein the pair of second curved portions is concave relative to the rotational axis.
6. The reamer of Claim 4 wherein the pair of second curved portions is convex relative to the rotational axis.
7. The reamer of Claim 4 wherein the pair of second curved portions is generally circular or parabolic.